



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

RECENT LITERATURE.

Kuntze's Revisio Generum. I.¹—Whenever a work appears in which the nomenclature is not exactly the same as that of the manuals in popular use, the charge is made that the "changes" are wanton and made simply from love of novelty or a desire to bring the author to notice. There may sometimes be ground for this charge when brought against makers of catalogues or writers of short notes in magazines. None of the writers who have treated nomenclature in that strict and consistent manner which renders necessary the abandonment of some familiar names have been in a position to entirely divest themselves of suspicion, as they generally made their investigations from the start with the sole purpose of determining the validity of names in use—not as incidental to some other work. These charges cannot be made with the same force against Kuntze's *Revisio Generum*—the most extensive and complete as well as one of the most radical revisions of nomenclature that has yet appeared.

Kuntze made a tour around the world from 1874–1876. He began to study and classify his collections made on that tour in 1884 at the Herbarium at Berlin. He worked there until 1887, when he went to Kew, where he continued his work until the end of 1890. The result is his "*Revisio*." It will be seen, therefore, that he did not begin the work of revision in cold blood of malice aforethought, but was drawn into it in the course of other investigations. In classifying his collections he attempted to do something more than identify them. He studied them, and as a result wrote several monographs, of which he published some separately and incorporated others in the present work. In the present condition of nomenclature, he found that next after the proper limitation of a genus or species, the determination of the name to be applied was of the highest importance, and that the latter had become a much more difficult task in some instances than the former, as those who had worked at the one with the greatest care had used little or no care in the other. He decided to examine the names he applied with the greatest care and to reach as far as possible a permanent result. The great extent of homonymy and synonymy made it necessary for him to examine every generic name in use in order to be sure that he was giving one whose title could not be

¹ *Revisio Generum Plantarum Vascularium omnium et Cellularium multarum secundum Leges Nomenclaturæ Internationales cum Enumeratione Plantarum in Itinere Mundi Collectarum*—Mit Erläuterungen, von Dr. Otto Kuntze, 1891. (In two parts).

doubted. To do this thoroughly, implied a revision of all the genera and he proceeded at once to examine the original sources and make a revision *de novo* instead of contenting himself with leaning upon the work of others. What ever may be thought of the result, in this case the motive can hardly be impeached. And it must be said, however radical his views on nomenclature seem, that in all other respects he is in the main very conservative. He repeatedly expresses his approval of Bentham and Hooker's limitations of genera and condemns severely the multiplication of genera or species.

He bases his revision upon the rules of the Congress at Paris in 1867, giving them a strict construction in order to prevent any doubt. He shows that these rules have not been followed in practice, but that there is no alternative between them and chaos in nomenclature. Some confusion has arisen also from defects in these rules—or as he expresses it, he found “leaks” in them. These leaks he has attempted to repair by framing additions and amendments to the rules. He made a thorough and complete revision of all the genera of Phanerogams and Pteridophytes and of many genera of Bryophytes, Fungi and Algæ which came to his notice in revising the nomenclature of the Phanerogams—as he was forced to examine everywhere to be sure that the names he adopted were not in prior use elsewhere. There is no complete unity in the work, for, besides the revision of nomenclature, in a few cases he has made a revision of the contents of a genus, or a monograph of the genus or some part of it, perhaps extending even to forms of a species. There is also a list of plants collected on his tour, dovetailed into the revision. The book seems to be a compilation of the work he did upon his collection or which he was drawn into in the progress of that work. It would take a critic almost as long to verify the work as it did the author to do it, and I wish it understood that the statements hereinafter made are on the authority of the work itself unless otherwise indicated.

The book opens with a long and somewhat rambling preface in which the author describes the circumstances which led him into the work. He then takes up the vital question of the necessity of such a revision and gives three principal causes of the alterations he has made. The first arises from matters of form as prescribed by the international rules. Some of these he has formulated more strictly and “completed in order to abate the multitude of variations and to bring controverted cases to an easy decision.” “Many persons,” he adds, “will recognize for the first time out of the mass of alterations the difficulties which inconsistencies in this respect may produce and the

necessity of fixed ground principles for nomenclature." The second cause is, "Correction of and atonement for accomplished wrong. This is the greatly preponderating cause of the restoration of many rightful names." "It is strange," he continues, "that the children of Flora, the advocates of *scientia amabilis* have so often given occasion in their naming '*nichts weniger als amabiles zu sein*' towards their comrades." The third cause is that monographers and universal systematists have mostly slighted the revision of generic names. Where they have had it brought to their notice, they have made some revisions, but for the most part they have taken what names they found. "Monographers," he says, "ought to have such revision in view next after their principal object; but they are often not in a position to do this, as in the correlation of homonymy the nomenclature of the whole system must be examined, for which the monographers mostly have not the requisite materials. In the concentration of their powers upon the internal work of the monograph, this revision is often discontinued. The universal systematists moreover, rely principally upon the monographs and seldom correct them—in this *circulus vitiosus* a careful study of the older sources is let slip by all."

In the introduction to his revision he supplements this statement by a detailed account of the causes of the present state of nomenclature; and the large number of examples which he gives certainly show a much more chaotic condition than one would suppose, even in spite of the discussions going on in the magazines, and the unfamiliar names to be met with in every new catalogue. "Above all," he says, "my revision shows that the present condition of botanical nomenclature is still very unhealthy. The great Linné indeed reformed Botany, but unfortunately he introduced a taint at the same time which has transmitted itself with botanists.....namely unfairness towards co-workers. If this taint does not disappear, the international nomenclature must perish, and this aid to an understanding between botanists become bankrupt. The botanical Congress in Paris in 1867 first made way for the cure. I hope through this work to accelerate it."

He also discusses in the preface the "Benthamian-rule" that a species-name is only an incident to the genus name and the international rule that "a name is a name." He criticises Bentham quite severely, and in the main justly, and gives some interesting examples of the way he multiplies species-names on changing a species from one genus to another. He shows that this was a general practice of the successors of Linnæus and of botanists early in this century, and observes that it is not to be expected that Englishmen will abandon this old

method merely because it produces inconvenience and confusion and adopt the international principle, any more than that they will even adopt the metric system or the centigrade thermometer or decimal system of money. In this section of modern English nomenclature he enlarges upon this in discussing "the renewed Kew rule" which is nothing but Bentham's rule again. He then discusses author-citation. After devoting some time to criticising the Boiserian or "pietistic" method, he gives his own view which is somewhat novel. The following extract also shows a characteristic of the book which strikes one very oddly at first. That is its polyglot composition (of also the title). English, French and Latin come unexpectedly upon the reader in the midst of the German on every page. The words in italics are in English in the original.

"*Convolvulus reptans* L. 1753 = *Ipomœa aquatica* Forsk 1775 (*misfortune or mostly piracy*) = *Ipomœa reptans* L (*pietism*) = *Ipomœa reptans* (L) *Pois* (*seduction*) = *Ipomœa reptans* *Pois* (L) (*correctness*) = *Ipomœa reptans* *Pois* (*International*)."
He thinks that "*Ipomœa reptans* *Pois* (*Convolvulus reptans* L.)" is the proper citation, and as an abbreviation of that he gets *I. reptans* *Pois*. (L.) "Earlier," he continues, "it seemed to me indifferent in which position the two authors were to be cited. But the citation of both authors in the sequence which I have denominated 'seduction' seduces through the practice of abbreviation by omitting the 'Pois,' unconsciously to the false method of pietism.....and is therefore to be rejected."

Admitting that "the citation of two authors alone leads to order" does it follow that the evil he deprecates will be obviated by the method proposed? Will a lazy or a hasty man be more certain to abbreviate by omitting the last author than by leaving out the first? Will he not be pretty sure to leave out the name in parenthesis wherever it stands? Or at least will he not be governed by a bias toward pietism or the reverse quite as much as by the order in which the names are written? It seems to me that his objection is fanciful and that his citation might well be termed "*distraction*" as increasing the already too numerous methods of citation.

After the preface there is a long introduction. He first treats of the materials for revision. Section 1 is devoted to a severe criticism of Durand's Index to Bentham and Hooker's *Genera Plantarum*—"BHgp" he abbreviates it. Among other things he charges that a large part of the index, including some errors, is borrowed without credit from Pfeiffer's *Nomenclator Botanicus*.

Section 2 is entitled "Certain common causes of the many mistakes in Durand's Index and on the future prevention of such mistakes." The first cause is inconsistent treatment of authors. Some are entirely neglected unless they were the emendators of a genus, while other "*beliebte Autoren*," though pre-Linnæan, are cited even to emended genera. Another cause, he points out, is inconsistency and confusion in the use of the abbreviations "MS.," "ined." etc. He distinguishes "such names found or given in MS. as are adopted and published by another author" from "names found in MS. which another author rejects, but which are published as synonyms." These he says are badly confused in practice, and he distinguishes the latter as "*nomina inapplicata* (n. inapl)" and the former as "*nomina adoptata* (n. adopt.)" He also points out the confusion resulting from irregular use of *non* for *p. p. emend.*, etc. and shows the cases to which it should be restricted. It will be seen that he is very strict as to the smallest details. It often seems as if the distinctions he draws were too small to notice until his formidable lists of the results of looseness are examined. He cites copiously and apparently exhaustively on every point and argues with some force.

In section 3 he considers Pfeiffer's "*Nomenclator Botanicus*" at some length, criticising some parts of it a little. Incidentally he says that neither Pfeiffer nor Durand took enough time for their work, and that as a result the former is "leaky," and the latter *sorgloss fehlervoll*."

Sections 4-12 deal with the "principal causes of the present condition of nomenclature." Section 4 is entitled "Linné's competition with his contemporaries." Linné, it seems, in reforming nomenclature, besides changing many bad names, "wilfully altered many good earlier genus names" and after 1737 was very free in altering the names given by those of his contemporaries who ventured to criticise him or who did not adopt his nomenclature. Says Kuntze: "Linné was great as an investigator, a discriminating observer, an ingenious thinker with immense talent for 'Systematics,' a tireless worker, an attached pupil, a genial man and on the whole an honorable character; but excessively greedy of honor. Easily accessible to flattery, very prone to neglect of acknowledgment, tolerating no opposition, feeling himself an autocrat; he often needlessly changed names (even those which he himself had previously adopted) and chastised his opponents and '*nichtbewunderer*' by neglect of the names adopted or given by them. He actually held it allowable to criticise the newly created genera of his contemporaries, if he adopted them or to apply

the names to entirely different plants. In this way he monopolized his nomenclature."

How far we may not be forced to tolerate this in Linné because of the necessity of a fixed foundation for nomenclature is a question which perhaps merits more careful consideration than Kuntze has given it. But there is no such reason in the case of Linné imitators, and as the root of all evil in nomenclature, they should not be allowed to escape with impunity. Linné is not the only man who considered himself the autocrat of botanical nomenclature. Subsequently, would-be despots and obligarchies have asserted this authority with great vigor. There are those now who assume a divine right to say what shall be and what shall not be, and, while crying out at all changes by others, themselves often make changes at will; retaining only those names which they or their ancestors have approved and made current.

In this connection Kuntze gives a list of the authors whom Linné slighted and whose names he 'rebaptized' and a number of examples of Linné's method. Two must be given, and they are not the worst: "upon *Cardamine lunaria* L = *Lunaria aegyptica* Juss. Adanson based a new genus, *Scopolia*. 'Immediately on this discovery,' writes Medicus, 'Linné separated it again from *Cardamine*, recognizing it as a separate genus, but changed the name *Scopolia* to *Ricolia*.'" Another case is *Heisteria* L. 1737, dedicated to Heister, a contemporary. Heister afterwards ventured to remonstrate against Linné's "shameful alterations in nomenclature," whereupon Linné chastized him by changing *Heisteria* to *Muraltia* (1767)!

Section 5, entitled "Inconsistencies of Linné and his contemporaries, and their alterations of their own names," continues the same subject, giving a large number of interesting examples.

Section 6 is headed "Brutal lawlessness of nomenclature after Linné until the beginning of the XIX century; Robert Brown, etc." The period treated of in this section might well be termed the feudal period of Botany. "After Linné's death" says Kuntze..... "anarchy broke out, as in other cases in history after the death of a reformer and dictator." There were on the one hand the heirs of Linné-*i.e.* the editors of the successive editions of his works, and on the other, a number of imitators of him, great Barons, as it were, none great enough to fill his place, and all more or less at war. Name-alteration went on pretty steadily now, and it is to this period that we are indebted for most of the present disorder in nomenclature. At this time was it that the habit of changing the species name of a plant put in a new genus, which is now perpetuated by the "renewed Kew rule,"

was formed. Says Kuntze: This was the flowering time of botanical robber-knighthood, the followers of which, for a part, were able investigators, but respected no author's right."

His remarks on Robert Brown in this connection are especially interesting. He says: "He was a great botanist *mit allüren eines Despoten*"....."Except Linné, who, however was a reformer of nomenclature and system, and in zeal for their introduction often went too far, no author, relatively, has offered me so many opportunities to correct the names wrongfully introduced or preferred by him as Robert Brown." "Under Robert Brown's great influence, a clique arose (Smith, Richard, Lindley, Wallich, Bentham) which has done marked injustice to certain other botanists.....[Salisbury for one;] yes one can say that he has founded a school in unrighteousness, of which many traces are to be found in 'BHgp.'"

Section 7 treats of "different conceptions of valid genus-formation." He distinguishes and limits *nomina nuda* (names published without description.) "So long," he says, "as the plant is sufficiently known, there is need neither of a plate nor of a description. Only when recognition is impossible, is the name to be marked '*nomen tantum*' or *nomen nudum*, etc." Bentham and Hooker do great injustice to Salisbury by dismissing with the words '*nomen tantum*' etc. the names of valid genera founded by him and published without description, but with reference to well known types upon which they were founded in a way that left no room for doubt. On the contrary they carefully protect the names in Wallich's Catalogue, the application of which, he charges, is sometimes very hard to recognize. "One does not name the description, but the plant, and defective diagnoses are often more perplexing than none at all."

We cannot blame Kuntze for remarking upon the injustice done to Salisbury. But in this case (and it is the only one as far as I have found) he departs from his customary strict interpretation of the rules. Common sense is doubtless on his side. But common sense differs considerably according to the person applying it; and Kuntze has warned us too many times against the slightest relaxation of rules.

Section 8. "Name-alterations by raising sections into genera and through linguistic changes," is the basis of some alterations in the international rules proposed by him. The subject will be considered later.

A very interesting section is section 9, entitled "Homonymy, a powerful cause of name-alteration and abiding source of danger to botanical nomenclature." Most of the cases of homonymy arise from

the repeated use of the same personal name, in the hope, apparently, that it will stick in some one place, and some obscure man can be honored in the end. There are a goodly number however which have not even this semblance of an excuse. Kuntze gives a list of *one hundred and fifty* personal genus-names which have been repeatedly and differently applied in this way—two of them to *seven* different groups, two to *six* groups and *fourteen to five*! As he says, this is a fearful list.

In order to furnish those who are desirous of honoring some person at all hazards a means of so doing without imperiling nomenclature he explains a number of devices by means of which a personal name can be made in so many ways that hereafter there should be no difficulty in providing even for such numerous families as the Smiths and Joneses. He gives a long list of precedents of endings, prefixes and combinations: some very good, some very bad, and a few so atrocious that even he is compelled to exclaim at them. He also gives examples of anagrams and translations—some of them very good—and of "*zusammengesezogene*" personal names, of which Pahlomagunsia O. K. is a fair sample. But this is not all. He thinks the termination "ago" when joined to a personal name very euphonious and gives some examples: Pritzelago O. K. To him "ago" suggests "agere" and seems suitable to a compiler. So he would say: Steudelago, Pfeifferago etc. An anatomist would get a "*toma*" attached to his name. (Does this refer to the fact that the person honored would be likely to *cut* him after making such a name?) Linné sometimes attached *inda* to the generic name of an Indian plant. So *inda*, *afra amra* and *asia* he considers proper terminations for genera dedicated to travelers or botanists in India, Africa, America and Asia. He makes for us on this theory Watsonamara O K., Schweinfurthafrä O K. and many others. Fries made a genus "Aaretis" for M. A. Aretis. This is all well enough for once, but Kuntze takes him up with "Pascardo" O K. (for P. A. Saccardo) and outdoes him with a suggested "Sirhookera." I do not believe such a collection of monstrosities was ever brought together before, the names fairly pack two pages of this section. It would be better that every man he so "honors" be forgotten, than that his name be made ridiculous forever by being joined to "carpum" or "fungus" after the manner of "Peckifungus" O K.; Henningsocarpum" O K.; "Philipimalva" O K etc. The possibilities of the field he has opened up for us are indeed great, witness: Smithia; Smithago; Johnsmithotoma; Igsmithia (J. G. Smith;) Smithialga; Smithodendrum. I dwell on this because it seems to me

that botanical Latin is impure enough already without such gratuitous monstrosities. The rule against names formed from two languages almost reaches them; good taste certainly ought to condemn them. It may be well enough to call attention to precedents for the sake of those who are determined to honor some person at all events, but like tracheotomy, they should be the last resort.—ROSCOE POUND.

(Concluded in March Number.)

Systematische und Topographische Anatomie des Hundes, Bearbeitet von Ellenberger und Baum.—*Berlin, Paul Parey*, 1891, pp. 646.—This book was produced at the suggestion of the veteran physiologist, Ludwig, of Leipzig (and one would be obliged to search far before arriving at a field of scientific work in any way related to animal physiology in which his suggestions have not borne good fruit). It is intended for zoologists, veterinarians and physiologists, more especially for the two former, for whom it places the dog on a plane with the horse and the ox, whose anatomy has been carefully worked out. For the physiologist it will rank with the works of Krause on the rabbit and Ecker on the frog. That it has been greatly needed will be acknowledged by all who have had to deal with the dog from the morphological, physiological, or medical standpoints. That it represents a vast amount of faithful labor on the part of the authors, who are instructors in the veterinary college at Dresden, not only in the examination of literature, but more especially in the practical study, with scalpel and forceps, is evident from a survey of the book itself. It is purely systematic and topographical, as the title indicates, all histological, ontogenetic, phylogenetic, comparative anatomical and physiological considerations (except as to the actions of the muscles), being omitted. The rigid restriction of the subject matter in this respect is a detraction and must result in narrowing the circle of users of the book. A broader treatment from the comparative standpoint would have added greatly to the interest and value. In this line the short discussions of the race differences in the various bones of the skeleton are an interesting feature. The physiologist can not fail to notice the lack of good descriptions and figures elucidating the physiological anatomy of the body. He has his Cyon, it is true, but Cyon is not all sufficient. The two hundred and eight figures in the text are with few exceptions original, and mostly of unusual excellence. Thirty-seven plates represent sections through the body in different planes and regions, and are given to show the topography of the parts, chiefly for operative purposes.